

ABSTRACT OF THE DISCLOSURE

There is provided a monocrystalline gallium nitride localized substrate suitable for manufacturing electronic-optical united devices in which electronic devices and optical devices are mixedly mounted on the same silicon substrate.

An area in which monocrystalline gallium nitride 410 is grown is locally present on a silicon substrate 100 by forming silicon carbide 200 on the silicon substrate 100 to locally form the monocrystalline gallium nitride 410 on the above-mentioned silicon carbide 200. Silicon nitride 220 is used as a mask in forming the above-mentioned monocrystalline gallium nitride 410.